Navajo Nation DWR – Water Management Branch

DROUGHT STATUS REPORT

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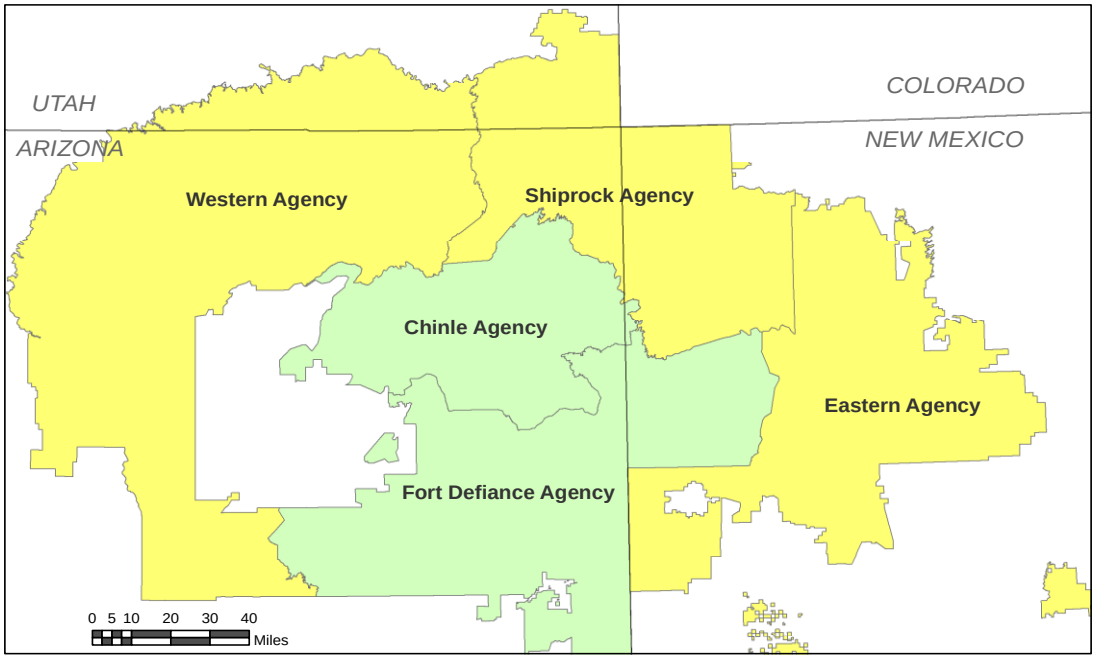
Navajo Nation Drought Map for August 2011



NN Drought Stage

- Chinle Agency 0.01 (Normal)
- Eastern Agency -0.58 (Alert)
- Fort Defiance Agency 0.14 (Normal)
- Shiprock Agency -0.17 (Alert)
- Western Agency -0.57 (Alert)

Data collected by Water Management Branch
Map by Bel B. Pachhai

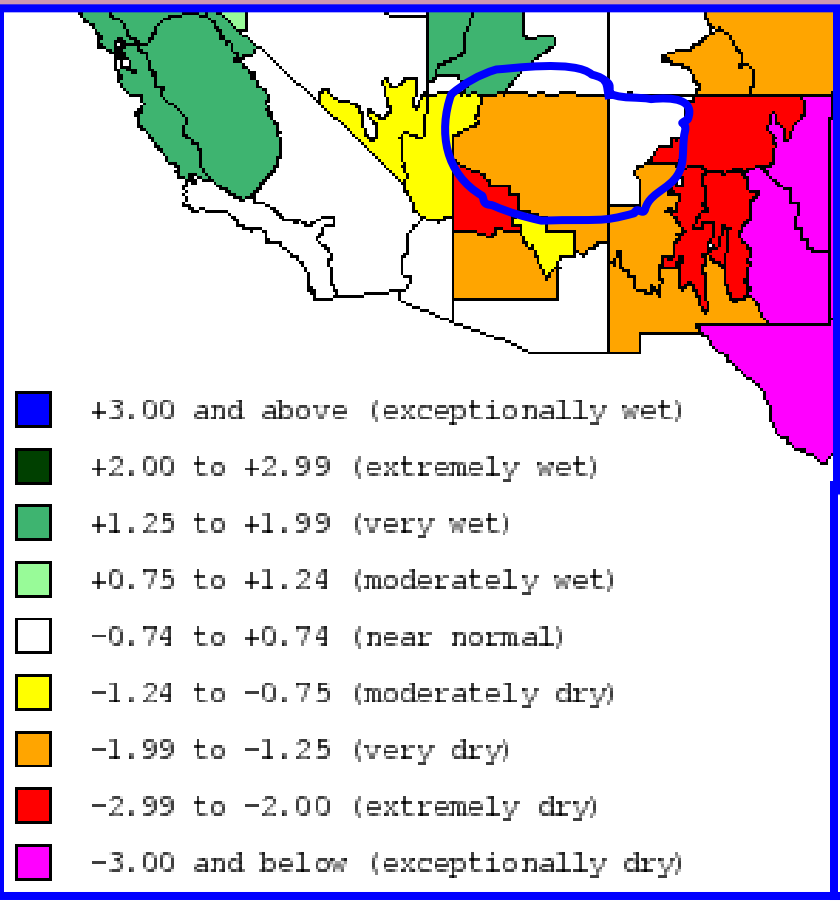
Navajo Nation Drought Summary

Navajo Nation Water Management Branch has a network of 135 precipitation collection sites across the Navajo Nation. On a monthly basis, these sites are checked manually for precipitation depths. The 6- month SPI is calculated on the basis of 18 years of precipitation data. The SPI value for a particular agency is the average of SPI values of all precipitation collection sites located within the agency boundary.

6 month SPI

Agency	July	August	Stage as of August
Chinle	-0.03	0.01	**Normal**
Eastern	-1.01	-0.58	**Alert**
Fort Defiance	-0.08	0.14	**Normal**
Shiprock	-0.14	-0.17	**Alert**
Western	-0.51	-0.57	**Alert**

Southwest Drought at Glance



6-Month SPI for August 2011 www.wrcc.dri.edu

Navajo Nation Drought Stage

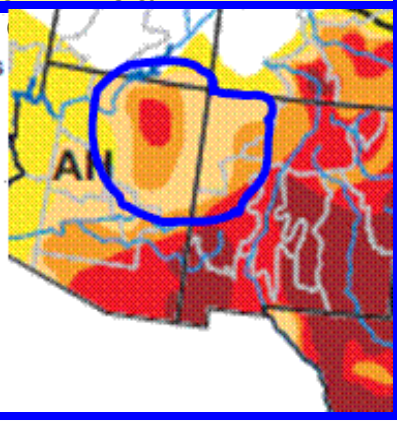
Location	6 month SPI July	6 month SPI August	Stage as of July
NE AZ	-0.54	-1.39	Warning
NW NM	-0.62	-0.01	Alert
SE UT	0.28	0.29	Normal

Drought Intensity Category

NN Drought	*US Drought*	
Normal	Normal	D0
Alert	Moderate	D1
Warning	Severe	D2
Emergency	Extreme-	D3 & D4

Drought Impact Types:
Delineates dominant impacts
A = Agricultural (crops, pastures, grasslands)
H = Hydrological (water)

Intensity:
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional



September 8, 2011 U.S. Drought Monitor http://drought.unl.edu/dm

Drought Summary by NDMC September 6, 2011

The West: It was a relatively quiet week across most of the West. The Four Corners region was above-normal temperature-wise, but the Pacific Northwest enjoyed unseasonably cooler weather. The common denominator is that the entire West saw very little in the way of precipitation. This has led expansion and introduction of D0 into southern Nevada as seasonal and year-to-date totals are now lagging behind the curve and vegetation has been stressed. Water supply is in very good shape region wide though. New Mexico continues to deteriorate the most given the inactive monsoon season thus far leading to an expansion of D3-D4 in the southwestern corner of the state.

Useful Drought Related Sites:

NWS-Climate Prediction Center Seasonal Outlook
www.drought.unl.edu

USGS Daily Stream Flow
www.usgs.gov/water/

NDMC Drought Impact Database Webpage
http://droughtreporter.unl.edu

Western Regional Climate Center
www.wrcc.dri.edu

CLIMAS Southwest Climate Outlook
www.climas.arizona.edu

Southwest Drought at Glance

Climate Summary by Climas August 23, 2011

Drought– Exceptional drought declined slightly in Arizona and New Mexico in the last month. However, monsoon rains generally have been below average and drought conditions are still widespread and intense in most of the region.
Temperature–A strong high pressure ridge has left New Mexico with extremely warm temperatures that have been between 2 and 8 degrees Fahrenheit above average in the last month. In Arizona, temperatures have been generally 0–4 degrees F above average.
Precipitation– The monsoon delivered above-average rain to southeastern Arizona in the last month; below-average rain still characterizes the monsoon season for most of the rest of Arizona and New Mexico.
ENSO– ENSO-neutral conditions are still present across the equatorial Pacific Ocean, but signs are mounting that weak La Niña conditions may return as early as this fall.
Climate Forecasts– Forecasts call for increased chances for above-average temperatures and below-average rainfall during the September–November period for most of Arizona and New Mexico. These forecasts are based in part on recent conditions and trends.
The Bottom Line–With much of the monsoon season now over, constant and copious rains have not yet materialized for most of the region. Only the southeastern and southwestern corners of Arizona and New Mexico, respectively, have experienced above-average rainfall. A more easterly position of the monsoon ridge, which has helped block moisture from New Mexico, and weak winds aloft, which have prevented storms from moving off the mountains and into the valleys, are partly to blame for the drier-than-average monsoon season. As a result, about 77 percent of New Mexico and 12 percent of Arizona are classified with exceptional and extreme drought, respectively. Relief does not appear to be on the horizon. Forecast models call for slightly increased chances for below-average rain in September. Also, forecasters have been increasing the odds that La Niña will return this winter—currently, there's a 44 percent chance that La Niña will develop and a 54 percent chance that neutral conditions will persist during November-January. A back-to-back La Niña event would likely intensify and spread drought to the region. Next month should provide a more definite picture of whether the winter will be influenced by La Niña.